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08/977,846	11/25/1997	JOHN O. RYAN	Q116830	3572
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EXAMINER BORISSOV, IGOR N				
ART UNIT 3628		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com  
PPROCESSING@SUGHRUE.COM  
USPTO@SUGHRUE.COM

# Office Action Summary

**Application No.**

08/977,846

**Applicant(s)**

RYAN, JOHN O.

**Examiner**

IGOR BORISSOV

**Art Unit**

3628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03/16/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 33-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 33-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Statement(s) (PTO/SF/42)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Amendment***

Amendment received on 03/16/2010 is acknowledged and entered. Claims 2-32 and 65-90 have previously been canceled. Claims 1, 41-43, 48, and 58 have been amended. Claims 1, and 33-64 are currently pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1. Claims 1, 33-44, 52, 54-56, 58-62, 67, 69 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631).**

As per Claims 1 and 58.

De Bey ('112) discloses:

a processor that processes a received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal

(a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42);

a user interface for interacting with the database, see figure 2 (keypad 54, TV 44 provides user input to select program stored in memories 42, 46);

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 2 (52) and page 9, lines 10-11, page 19, lines 32-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 8, line 4).

While De Bey teaches that the user interface provides an access to the program stored in the database, De Bey does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus.*

Yoshio et al ('631) (Yoshio) discloses:

a tuner for receiving a broadcast signal,

a memory coupled to the tuner for storing data in the received broadcast signal in a database,

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 25, [0009] line 5; [0010] line 6; page 27, [0013] line 13.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify De Bey to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to organize the programs by the interest or designate the programs by a reference point, thereby allowing the user to select the desired channel quickly without memorizing the program code, as disclosed in Yoshio.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify De Bey to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have

recognized that the results of the combination were predictable. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

As per Claim 33.

De Bey ('112) further discloses the memory stores the entire database, see page 7, lines 1-33 and page 11, lines 12-15.

As per Claim 34.

De Bey ('112) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 35.

De Bey ('112) further discloses non-volatile memories such as ROM, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 36.

De Bey ('112) further discloses the received audio data has been converted from analog form to digital form, see page 9, lines 36-38.

As per Claim 37.

De Bey ('112) further discloses the received audio data is digitized and has been compressed, see page 9, lines 36-38.

As per Claim 38.

De Bey ('112) further discloses the received audio data is encrypted, see page 11, lines 30-38.

As per Claim 39.

While De Bey (122) teaches that the disclosed system provides transmission optimization for either digital or analog information signals, Be Bey does not specifically disclose analog to digital conversion.

Yoshio et al ('631) further discloses the received data has been converted from

analog form to digital form, see page 26, lines 17-19 as an old and well known method of reproducing signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the analog to digital conversion of Yoshio et al ('631) as an old and well known method of reproducing signals. As per "alphanumeric" data per se, it does not matter what type of data (the content of data) being converted.

As per Claim 40.

De Bey ('122) does not specifically disclose a voice synthesizing.

Yoshio et al ('631) further discloses the use of a voice synthesizer in data management, see page 26, lines 17-19 as an old and well known method of reproducing voice signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the voice synthesis of Yoshio et al ('631) as an old and well known method of reproducing voice signals.

As per claims 41, 67 and 76.

De Bey ('122) further discloses the data is in digital form, see page 9, line 11, encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32.

As per Claim 42.

De Bey ('122) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 11, lines 12-15.

As per Claim 43.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1.

As per Claim 44.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40.

As per Claim 52.

De Bey ('112) further discloses the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25.

As per Claim 54.

Yoshio et al ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 55.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 56.

De Bey (112) further discloses optical disk, see page 7, line 27.

As per Claim 59.

Same reasoning as applied to claims 1 and 58.

As per Claim 60, 61.

Yoshio et al ('631) further discloses that the broadcasted data which the tuner is adapted to record includes the at least one entire program, such as news or English courses, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program. Alternatively, it is

noted that claims 60, 61 do not provide any indication/limitaions of the volume of data to be received or memory capacity of the device. As such, the content of the received and stored data cannot affect the fact that the data has been stored, regardless is it the at least one entire program, a portion of the program, or a set of programs.

As per Claim 62.

De Bey ('112) discloses:

a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42). The content of the data, including continuous updates, cannot affect the method steps performed, therefore not given patentable weight. MPEP 2106 (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. Furthermore, updates of a broadcasted program is obvious variation of the broadcasted program.

**2. Claims 45-50, 53, 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey ('112) in view of Yoshio et al ('631) and further in view of Official Notice.**

As per Claim 45.

The combination does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well know as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.



As per Claim 46.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination does not explicitly disclose:

a manual input device adapted to be mountable on an automobile steering wheel; and

a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

The combination does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claims 48 and 68.

The combination does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the

desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 49.

The combination does not disclose an amplifier.

Official notice is taken that amplifiers are old and well known to amplify signals sent to speakers as can be seen in Schwob (5,152,011) figure 1 (26) for the benefit of amplifying signals sent to speakers.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use an amplifier as taught by Schwob ('011) for the benefit of amplifying signals sent to speakers.

As per Claim 50.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination does not explicitly disclose:

connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 53.

The combination does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized

media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

**3. Claims 1, 33-37, 49, 52, 54-56, 58-61, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (5,057,932) in view of Yoshio et al ('631).**

As per Claims 1 and 58.

Lang ('932) discloses:

a processor that processes a received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal

(a tuner for receiving a broadcast signal, see figure 3 and column 11, lines 9-40;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 3, (13), column 8, lines 38-50 and column 11, line 30 ;

a user interface for interacting with the database, see column 6, line 53, column 11, lines 3240 and column 8, lines 27-33;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 3 (14);

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see figure 3 (12).

While Lang teaches that the user interface allows the user to select a desired frame number from the menu (C. 6, L. 40-42), Lang does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*.

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lang to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio et al, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lang to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

As per Claim 33.

Lang ('932) further discloses the memory stores the entire database, see column 8, lines 27-33.

As per Claim 34.

Lang ('932) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see figure 3 (13, 14).

As per Claim 35.

Lang ('932) further discloses non-volatile memories such as ROM, see figure 3 (14).

As per Claim 36.

Lang ('932) further discloses the received audio data has been converted from analog form to digital form, see figure 3 (A/D, D/A) and column 5, lines 51-53.

As per Claim 37.

Lang ('932) further discloses the received audio data is digitized and has been compressed, see figure 3 (ND, D/A) and column 3, line 51 - column 5, line 50.

As per Claim 49.

Lang ('932) further discloses an amplifier connected to the speech producing sub-system for amplifying the analog signal, see column 11, lines 60-63.

As per Claim 52.

Lang ('932) further discloses a memory stores the data received in a random access memory up to the capacity of the random access memory before transferring said data to one of a disk medium or a tape medium, see column 9, lines 38-56.

As per Claim 54.

Lang ('932) further discloses disk medium is a magnetic disk, see column 6, line 28-39.

As per Claim 55.

Lang ('932) further discloses disk medium is a magnetic-optical disk, see column 6, line 28-39.

As per Claim 56.

Lang ('932) further discloses disk medium is an optical disk, see column 6, line 28-39.

As per Claim 59.

Lang ('932) further discloses the received information is transmitted by a broadcast signal, see figure 3.

As per Claim 60, 61.

Yoshio et al ('631) further discloses that the broadcasted data which the tuner is adapted to record includes the at least one entire program, such as news or English courses, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program. Alternatively, it is noted that claims 60, 61 do not provide any indication/limitaions of the volume of data to be received or memory capacity of the device. As such, the content of the received and stored data cannot affect the fact that the data has been stored, regardless is it the at least one entire program, a portion of the program, or a set of programs.

**4. Claims 38, 41-42, 67 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of Rovira (WO 92/10040).**

As per Claim 38.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose that the received audio data has been encrypted.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to digitize and encrypt the data transmission for the benefit of increased security of data transmission.

As per Claims 41, 67 and 76.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose a decryptor for decrypting the data.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decryptor for decrypting, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of reversing the encryption, compression and conversion of the broadcast data.

As per Claim 42.

Same reasoning as applied to claim 41.

**5. Claims 39-40, 45-48, 50-51, 53, 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of in view of Official Notice.**

As per Claim 39.

The combination of Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and has been converted from analog to digital form.

Official Notice is taken that it is old and well known to convert data from analog to digital, the type of data does not matter, further Atkinson "VCR programming: Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alpha numerics in VCRs, for the benefit of making VCRs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form for the benefit of easier setting of the VCR.

As per Claim 40.

The combination of Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and is converted to voice data by a speech synthesizer.

Official Notice is taken that it is old and well known to convert data from analog to digital, the type of data does not matter, further it is well known for radios and televisions to have voice for the benefit of listening to the audio portion of the program.



Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form and convert voice data by a speech synthesizer for the benefit of listening to the audio portion of the program.

As per Claim 45.

The combination of Lang and Yoshio et al. does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well known as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

While Yoshio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of Lang and Yoshio et al. does not disclose:

a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

The combination of Lang and Yoshio et al. does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claims 48 and 68.

The combination of Lang and Yoshio et al. does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 50.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of Lang and Yoshio et al. does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for

the user.

As per Claim 51.

The combination of Lang and Yoshio et al. does not disclose a hierarchy for the database.

Official Notice is taken that hierarchical databases are old and well known, as taught by Date "An introduction to Database Systems" in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to create a hierarchical database as an old and well known method of structuring a database.

As per Claim 53.

The combination of Lang and Yoshio et al. further discloses a tape medium and various digital media, see column 3, lines 51-56 and column 6, line 28-39, but does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination of Lang and Yoshio et al. does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

**6. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631), further in view of Rovira (WO 92/10040) and further in view of De Bey ('112).**

As per Claim 43.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 44.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

**7. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631) and further in view of Ryan.**

As per Claim 63.

De Bey and Yoshio teaches all the limitations of claim 63, except that received items of data include a data stamp thereby to indicate currency of the data.

Ryan teaches a system for dissemination of information, including a receiver adapted to receive information from a FM subcarrier, wherein data received in the receiver includes a date stamp to indicate to the user the currency of the information (C. 7, L. 63-65).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. *See Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

**8. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631) and further in view of Myers et al.**

As per Claim 64.

De Bey and Yoshio teaches all the limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent

to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. *See Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

## 9. ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1, 33-37, 45, 49, 58-62 are rejected under 35 U.S.C. 102(a) as being anticipated by Browne et al. (W) 92/22983).**

Browne et al. (Browne) teaches:

Claims 1 and 58: A receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a processor that processes a received broadcast signal including data, stores the data as a database in a memory, provides a user interface including a set of menus describing the database, and accepts selections from the set of menus, selects data from the database in response to the accepted selections, provides the selected data in digital form and converts the selected data from digital form to an analog signal

(a tuner for receiving a broadcast signal (Fig. 7, item 702; page 9, lines 20-24);  
a memory coupled to the tuner for storing data in the received broadcast signal in a database (Fig. 1, item 104);  
a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 27- page 14, line 8);  
a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and  
a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item 110; page 15, lines 7-13).

Claim 33: The receiver of Claim 1, wherein the memory stores the entire database (page 14, lines 3-7).

Claim 34: The receiver of Claim 1, wherein the memory comprises a combination of a volatile RAM memory and a non-volatile memory (page 10, line 30 - page 11, line 11).

Claim 35: The receiver of Claim 34, wherein the non-volatile memory is selected from the group consisting of an audio tape, a magneto-optical mini-disk, a magnetic disk or an optical disk (page 10, line 30 - page 11, line 3).

Claim 36: The receiver of Claim 1, wherein the received data is audio data that has been converted from analog form to digital form (Fig. 1, item 102; page 10, lines 4-8).

Claim 37: The receiver of Claim 36, wherein the received audio data is digitized and has been compressed (Fig. 1, items 102, 103; page 10, lines 4-8, 13-20).

Claim 45: The receiver of Claim 1, wherein the user interface is voice activated (page 30, line 28 - page 31, line 23).

Claim 49: The receiver of Claim 1, further comprising:  
an amplifier connected to the speech producing sub-system for amplifying the analog signal; and means for converting the amplified signal to sound (page 15, lines 9-13).

Claim 59: The method of Claim 58, wherein the received information is transmitted by a broadcast signal (page 9, lines 20-24).

Claim 60: The receiver of Claim 1, wherein the memory is sufficient to store data representing the content of at least one entire program (page 8, lines 1-14).

Claim 61: The method of Claim 58, wherein the stored information includes the content of at least one entire program (page 8, lines 1-14).

Claim 62: The receiver of Claim 1, wherein the receiver is adapted to receive and store in the memory continuous updates of the data (page 8, lines 10-14).

**10. Claim 38, 41-44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of De Bey (WO 99/03112).**

Claim 38: Browne teaches all limitations of claim 38, except that the received audio data has been encrypted.

De Bey ('112) teaches the received audio data is encrypted, see page 11, lines 30-38, for the benefit of increased security of data transmission.



Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to encrypt the data transmission for the benefit of increased security of data transmission. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include encrypting the data as taught by De Bey ('112) in the system of Browne, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

Claims 41.

Browne does not disclose a decryptor for decrypting the data.

De Bey ('112) teaches data encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32 for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

Claim 42.

Browne does not disclose that said system has a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include decrypting the data transmission as disclosed in De Bey ('112), for the benefit of increased security of

data transmission.

Claim 43.

Browne does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include providing a key for decrypting the data transmission, as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

As per Claim 44.

Yoshio et al ('631) do not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include decrypt the data transmission as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

**11. Claims 39, 52, 53, 54, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of De Bey and further in view of in view of Official Notice.**

Claim 39: Browne teaches all limitations of claim 39, except that the received data, which has been converted from analog to digital form, is alphanumeric data and.

Official Notice is taken that it is old and well know to convert data from analog to digital, the type of data does not matter, further Atkinson "VCR programming:

Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alpha numerics in vcrrs, for the benefit of making vcrrs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include converting alphanumeric data to digital form for the benefit of easier setting of the vcr.

Claim 52. De Bey ('112) teaches the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25 for the benefit of storing the data without exceeding ram buffer capacity.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include storing data received in a random access memory up to the capacity of the random access memory before transmitting said data to a disk medium as taught by De Bey ('112) for the benefit of storing the data without exceeding ram buffer capacity.

Claim 53: The receiver of Claim 52, wherein the tape medium is a digital audio tape (Browne, page 11, line 2).

Claim 54: The receiver of Claim 52, wherein the disk medium is a magnetic disk (Browne, page 1).

Claim 56: The receiver of Claim 52, wherein the disk medium is an optical disk (Browne, page 11, line 1-2).

**12. Claims 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Yoshio et al ('631).**

Claim 40: Browne teaches all limitations of claim 40, except that the alphanumeric data is converted to voice data by a speech synthesizer.

Yoshio et al ('631) further discloses the use of a voice synthesizer in data management, see page 26, lines 17-19 as an old and well known method of reproducing voice signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the voice synthesis of Yoshio et al ('631) as an old and well known method of reproducing voice signals.

**13. Claims 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Guenther et al. (US 5,086,510).**

Claims 46 and 50: Browne teaches all limitations of claims 46 and 50, except that the user interface includes: a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

However, Guenther discloses a control systems on automobile steering wheels (figure 4) for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller for the benefit of better visibility of the controls for the user.

**14. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Benbassat et al (US 4,700,322).**

Claim 47: Browne teaches all limitations of claim 47, except that the user interface includes a control for determining a speed at which the speech producing sub-system outputs the analog signal.

Benbassat teaches determining the speed at which the speech device output the output signal as can be seen in (column 1, lines 28-50) for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include that the user interface includes a control for determining a speed at which the speech producing sub-system outputs the analog signal, as taught by Benbassat for the benefit of synchronizing speech with the visualization of messages.

**15. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Whitby et al (GB 2 258 102).**

Claim 48: Browne teaches all limitations of claim 48, except that the tuner channel skips to tune to a particular transmitter.

Whitby teaches a tuner adapted to skip channels to get to the desired transmitter, as seen in page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include to skip channels to get to the desired transmitter, as taught by Whitby for the benefit of presetting the device to access a specific transmitter.

**16. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Date "An introduction to Database Systems".**

Claim 51. Browne teaches all limitations of claim 51, except explicitly teaching designating a hierarchy for the database.

However, Date discloses designating a hierarchy for the database in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include to create a hierarchical database as disclosed in Date, as an old and well known method of structuring a database.

**17. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of De Bey and further in view of Yoshio et al ('631).**

Claim 55. Browne teaches all limitations of claim 55, except that the disk medium is a magnetic-optical disk.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

**18. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Official Notice.**

Claim 57. Browne teaches all limitations of claim 57, except that speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include varying the transmission of the broadcast signal for the benefit of most efficiently use the available bandwidth.

**19. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Ryan.**

Claim 63.

Browne teaches all limitations of claim 63, except that received items of data include a data stamp thereby to indicate currency of the data.

Ryan teaches a system for dissemination of information, including a receiver adapted to receive information from a FM subcarrier, wherein data received in the receiver includes a date stamp to indicate to the user the currency of the information (C. 7, L. 63-65).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. *See Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

**20. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Myers et al. (US 5,272,752).**

As per Claim 64.

Browne teaches all limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent

to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. See *Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, and 33-64 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/  
Primary Examiner, Art Unit 3628  
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